STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: _____ *10/707,039*
Source: _____ *IFW?*
Date Processed by STIC: _____ *09/15/2005*

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**
FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO **REDUCE** ERRORED SEQUENCE LISTINGS, **PLEASE** USE THE **CHECKER VERSION 4.2.2 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
   http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (**<http://www.uspto.gov/ebc/efs/downloads/documents.htm>** , EFS Submission **User Manual** - ePAVE)
2. **U.S. Postal Service:** Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. **Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):**
   U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/24/05

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: *10/707,039*

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1_____Wrapped Nucleics
Wrapped Aminos
The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor **after** creating it. Please adjust your right margin to .3; this will prevent "wrapping."

2_____Invalid Line Length
The rules require that a line **not exceed 72 characters** in length. This includes white spaces.

3_____Misaligned Amino
Numbering
The numbering under each 5th amino acid is misaligned. Do **not** use tab codes between numbers; use **space characters**, instead.

4_____Non-ASCII
The submitted file was **not** saved in ASCII(DOS) text, as **required** by the Sequence Rules. **Please ensure your subsequent submission is saved in ASCII text.**

5_____Variable Length
Sequence(s)_____contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue.** Please present the **maximum** number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.

6_____PatentIn 2.0
"bug"
A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**

7_____Skipped Sequences
(OLD RULES)
Sequence(s) _____ missing. If intentional, please insert the following lines for **each** skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i)   SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to **include** the skipped sequences.

8_____Skipped Sequences
(NEW RULES)
Sequence(s) _____ missing. If **intentional**, please insert the following lines for **each** skipped sequence.
<210> sequence id number
<400> sequence id number
000

9_____Use of n's or Xaa's
(NEW RULES)
Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of **n** or **Xaa**, and which residue **n** or **Xaa** represents.

10_____Invalid <213>
Response
Per 1.823 of Sequence Rules, the only **valid** <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is **required** when <213> response is Unknown or is Artificial Sequence

11_____Use of <220>
<220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32)   (Sec. 1.823 of Sequence Rules)

12_____PatentIn 2.0
"bug"
Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

13_____ Misuse of n/Xaa
"n" can only represent a single <u>nucleotide</u>; "Xaa" can only represent a single <u>amino acid</u>

AMC – Biotechnology Systems Branch – 09/09/2003

RAW SEQUENCE LISTING   DATE: 09/15/2005
PATENT APPLICATION: US/10/707,039   TIME: 11:16:18

Input Set : A:\PTO.RJ.txt
Output Set: N:\CRF4\09152005\J707039.raw

```
   3 <110> APPLICANT: Seale, Jeffrey W.
   4        Vordtriede, Paul B.
   6 <120> TITLE OF INVENTION: Amino Acid Sequence Variant Alfalfa Antifungal Protein and
Its Use in
   7        Plant Disease Control
   9 <130> FILE REFERENCE: 38-21(15546)
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/707,039
C--> 11 <141> CURRENT FILING DATE: 2003-11-17
  11 <160> NUMBER OF SEQ ID NOS: 4
  13 <170> SOFTWARE: PatentIn version 3.1
  15 <210> SEQ ID NO: 1
  16 <211> LENGTH: 135
  17 <212> TYPE: DNA
  18 <213> ORGANISM: Medicago sativa
  20 <220> FEATURE:
  21 <221> NAME/KEY: CDS
  22 <222> LOCATION: (1)..(135)
  23 <223> OTHER INFORMATION:
W--> 26 <400> 1
  27 aga aca tgt gag aat ttg gca gat aaa tat agg gga cca tgc ttt agt        48
  28 Arg Thr Cys Glu Asn Leu Ala Asp Lys Tyr Arg Gly Pro Cys Phe Ser
  29 1               5                   10                  15
  31 ggt tgt gac act cac tgc aca acc aaa gag aac gca gtt agt gga agg        96
  32 Gly Cys Asp Thr His Cys Thr Thr Lys Glu Asn Ala Val Ser Gly Arg
  33               20                  25                  30
  35 tgt agg gac gac ttc cgc tgc tgg tgt act aaa aga tgt               135
  36 Cys Arg Asp Asp Phe Arg Cys Trp Cys Thr Lys Arg Cys
  37             35                  40                  45
  40 <210> SEQ ID NO: 2
  41 <211> LENGTH: 45
  42 <212> TYPE: PRT
  43 <213> ORGANISM: Medicago sativa
  45 <400> SEQUENCE: 2
  47 Arg Thr Cys Glu Asn Leu Ala Asp Lys Tyr Arg Gly Pro Cys Phe Ser
  48 1               5                   10                  15
  51 Gly Cys Asp Thr His Cys Thr Thr Lys Glu Asn Ala Val Ser Gly Arg
  52               20                  25                  30
  55 Cys Arg Asp Asp Phe Arg Cys Trp Cys Thr Lys Arg Cys
  56             35                  40                  45
  59 <210> SEQ ID NO: 3
  60 <211> LENGTH: 135
  61 <212> TYPE: DNA
  62 <213> ORGANISM: Artificial Sequence
  64 <220> FEATURE:
```

Does Not Comply
Corrected Diskette Needed

(pg -2)

RAW SEQUENCE LISTING   DATE: 09/15/2005
PATENT APPLICATION: US/10/707,039   TIME: 11:16:18

Input Set : A:\PTO.RJ.txt
Output Set: N:\CRF4\09152005\J707039.raw

```
65 <223> OTHER INFORMATION: AlfAFP1 D8R
67 <220> FEATURE:
68 <221> NAME/KEY: CDS
69 <222> LOCATION: (1)..(135)
70 <223> OTHER INFORMATION: AlfAFP1 D8R
73 <400> SEQUENCE: 3
74 aga aca tgt gag aat ttg gca aga aaa tat agg gga cca tgc ttt agt
75 Arg Thr Cys Glu Asn Leu Ala Arg Lys Tyr Arg Gly Pro Cys Phe Ser
76 1               5                   10                  15
78 ggt tgt gac act cac tgc aca acc aaa gag aac gca gtt agt gga agg
79 Gly Cys Asp Thr His Cys Thr Thr Lys Glu Asn Ala Val Ser Gly Arg
80              20                  25                  30
82 tgt agg gac gac ttc cgc tgc tgg tgt act aaa aga tgt
83 Cys Arg Asp Asp Phe Arg Cys Trp Cys Thr Lys Arg Cys
84          35                  40                  45
87 <210> SEQ ID NO: 4
88 <211> LENGTH: 45
89 <212> TYPE: PRT
90 <213> ORGANISM: Artificial Sequence
92 <220> FEATURE:
93 <223> OTHER INFORMATION: AlfAFP1 D8R
95 <400> SEQUENCE: 4
97 Arg Thr Cys Glu Asn Leu Ala Arg Lys Tyr Arg Gly Pro Cys Phe Ser
98 1               5                   10                  15
101 Gly Cys Asp Thr His Cys Thr Thr Lys Glu Asn Ala Val Ser Gly Arg
102             20                  25                  30
105 Cys Arg Asp Asp Phe Arg Cys Trp Cys Thr Lys Arg Cys
106         35                  40                  45
```

Handwritten annotations:

→ Invalid Response. what is the source of Genetic Material?

48 P/s see Stem II

96 II on Error Summary Sheet.

135

→ Same Error.

VERIFICATION SUMMARY   DATE: 09/15/2005
PATENT APPLICATION: **US/10/707,039**   TIME: 11:16:19

Input Set : **A:\PTO.RJ.txt**
Output Set: **N:\CRF4\09152005\J707039.raw**

L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:26 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:1,Line#:23